

R marks/Arguments

Claims 3-5, 13-15 and 20-44 are withdrawn from consideration as being drawn to a nonelected invention. Claims 1, 2, 6-12, 16-19 and 45 are currently pending. The oversight regarding claim dependencies has been addressed. Applicants apologize for any inconvenience caused by this oversight.

Submitted herewith is a copy of the original Application Data Sheet that was filed in connection with the above-identified application and copies of the receipt post card stamped by the U. S. Patent and Trademark Office. The continuity data precedes the inventor information. Thus, it is respectfully submitted that Applicant has complied with the condition(s) for receiving the benefit of an earlier filing date. It should be noted that the originally submitted ADS was amended to correct inventor information.

Claims 1, 2, 6-12, 16-19 and 45 have been amended to address the issues raised under 35 USC §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 has been amended to recite that the two fully complementary RNA regions are in proximity to the target mRNA. Support for the term "fully" can be found in the specification on page 18 at lines 20-34 and on page 22 at lines 29-36 and Example 7.

The term "expressed RNA" has been rewritten as "RNA expressed by the host".

The term "substantially similar" has been replaced by the expression "that has at least 80% sequence identity with the RNA expressed by the host based on the Clustal method of alignment." Support for this can be found in the specification starting at line 31 on page 13 through line 2 on page 14.

The term "unrelated" has been replaced with "do or does not share sequence identity with". Support for this can be found in the specification on page 18 at lines 28-34 and in Example 7.

It is stated on page 5 of the Office Action that the term "a synthetic, non-naturally occurring RNA sequence" is unclear. Attention is kindly invited to page 16 of the specification at lines 12-13 which states that the "term 'non-naturally occurring' means artificial, non consistent with what is normally found in nature." An example of such a sequence is "ELVISLIVES" (SEQ ID NOs:12 and 13). This is also discussed in Example 7. Thus, it is respectfully submitted that this term is clear and definite.

Withdrawal of the rejection of the claims under 35 USC §112, second paragraph, is respectfully requested.

Claims 8-10 and 18-20 were rejected under 35 USC §112, first paragraph, as not being enabling for methods of reducing expression of a target RNA in a host or host cell in vivo (whole organism) in a vertebrate organism. The claims have been amended to recite an invertebrate host. Support for this can be found in the specification on page 21 at lines 20-25. Thus, no new matter has been added.

It is respectfully submitted that this ground of rejection is rendered moot by virtue of this amendment to the claims.

Claims 1, 2, 6-12 and 16-19 were rejected under 35 USC §102(b) as being anticipated by Thompson (US Patent No. 5, 902,880)

The '880 patent concerns RNA polymerase III-based methods and systems for expression of therapeutic RNAs in cells in vivo or in vitro. It is stated in column 3 starting at line 65 through line 3 of column 4 that Applicant "has determined that the level of production of a foreign RNA, using a RNA polymerase III (pol III) based system, can be significantly enhanced by ensuring that the RNA is produced with the 5' terminus and a 3' region of the RNA molecule base-paired together to form a stable intramolecular stem structure. . . "

The focus of the '880 is to provide gene therapy, specifically expression of therapeutic RNAs so that they accumulate intracellularly .

In contrast, the instant invention is **not** concerned with increasing expression of therapeutic amounts of antiviral RNA in vertebrate cells. Rather, the instant inventions concerns **reducing** expression of the target mRNA in an invertebrate host.

In order for a reference to anticipate the claimed invention, it must disclose each and every element of the claimed invention. It is respectfully submitted for the reasons discussed above that Thompson '880 does not anticipate the instant invention.

Claims 1, 2, 6-12 and 16-19 were rejected under 35 USC 102 (e) as being anticipated by Thompson (US Patent No. 6,146,886).


The '886 patent concerns a comparable focus as that of the '880 patent, namely, RNA polymerase III-based methods and systems for expression of therapeutic RNAs in cells in vivo or in vitro. It is stated in column 4 at lines 32-35 that the "construct described in this invention is able to accumulate RNA to a significantly higher level than other constructs, even those in which 5' and 3' ends are involved in hairpin loops."

In contrast, the instant invention is concerned with constructs useful in reducing expressing of the target mRNA in an invertebrate host. Accordingly, it is respectfully submitted for the reasons discussed above that Thompson '880 does not anticipate the instant invention.

It is respectfully submitted that the claims are now in form for allowance, which allowance is respectfully requested.

A Petition for a two (2) month extension of time accompanies this response. Please charge any fees or credit any overpayment of fees which are required in connection with the filing of this Response and Petition for Extension of Time to Deposit Account No. 04-1928 (E. I. du Pont de Nemours and Company).

Respectfully submitted,


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